

Oakland Mole Survey Information

(Summary of Photo Control Points and Survey Notes)

Volume 1 of 2

**San Francisco-Oakland Bay Bridge
East Span Seismic Safety Project**

April 2001

NOTE

THE DATE OF SURVEY WAS JANUARY 15, 1997 AND APRIL 1997. PLEASE VERIFY SURVEY POINTS AND THEIR VALUES BEFORE USING.

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NOTE

**THE PHOTO CONTROL POINTS ARE SHOWN IN
VOLUME 2 OF 2.**

SUMMARY OF PHOTO CONTROL POINTS

JOB: 97-058 Metric 83/29

PARTY CHIEF: KEVIN AKIN

E.A.: 04-01200K

LOCATION: ALA-80 P.M. 1.0-2.3 (SFOBB TOLL PLAZA AREA)

STATION	N	E	ELEV.
MOLE	648154.168	1838879.640	
ALA-16	649975.865	1841815.857	
MOLE RM-1			2.917
BB-16 4847			2.748
HV-1	648386.543	1841250.493	2.068
HV-2	648669.827	1840697.552	2.422
HV-3	648881.738	1840205.024	1.780
HV-4	648453.874	1840440.947	2.674
HV-5	648341.745	1839813.825	2.997
HV-6	648258.323	1839378.504	3.081
HV-7	648117.145	1838893.412	2.504
V-1			2.346
V-2			2.245
V-2A			2.031
V-3			1.946
V-3A			1.728
V-4			1.704
V-4A			1.950
V-5			2.317
V-6			2.996
V-7			2.961
V-8			2.865
V-9			3.165
V-10			2.327
V-11			2.547
V-12			2.449
V-13			2.430
V-14			2.579
V-15			2.984
V-16			2.568
W-1			2.539
W-2			2.322
W-2R			2.371
W-3			1.540
W-4 (T)			2.640
W-5 (T)			1.789
W-6			1.787
W-7			2.335
W-8			2.416
W-9			1.535
W-10			1.287
W-11			1.758
W-12			4.035
W-13			2.223
W-14			1.391
W-15			2.003
AR-742			2.642
AJ-368			2.521
AR-755			1.190
AR-759			1.162
AR-757			1.650
ALA-15			1.460



83/29

SUMMARY OF PHOTO CONTROL POINTS

CHARGE UNIT-EXPND. AUTH. 04-01200K		PARTY CHIEF Kevin Akin		RECORDER K.A.		COMMENTS C = CLOTH P = PAINTED	
STATION	HORIZ & VERT	VERT ONLY	TARGET ELEV.	STA. ELEV.	TARGET		DESCRIPTION OR REMARKS
					C	P	
HV-1	X			2.068		X	Set PK $\frac{1}{2}$ CHC Brass shnr. on S'ly Side of Burma Rd, North of "A" St and between electrolier & RR crossing signal
HV-2	X			2.422		X	Set PK in cntr of Radio station Rd. N. of WB 80
HV-3	X			1.780	X		Set PK $\frac{1}{2}$ tin shnr in Ac Rd near radio towers.
HV-4	X			2.674		X	Set PK in S. Shldr E.B. ramp to West Grand Ave $2\frac{40}{m}$ N. of K Rail
HV-5	X			2.997		X	Set PK in AC Shldr 13M \pm N of Conc Curb.
HV-6	X			3.081		X	Set PK in AC frontage Rd 16M \pm W'ly of large OH sign above EB lanes $\frac{1}{2}$ S'ly of N. EP
HV-7	X			2.504		X	Fd old TGT with no nail. Set PK in AC W'ly end of Military AC Rd $1\frac{15}{m}$ E'ly of W. EP.
CHECKED	DATE	CO.	RTE.	PM	DATE OF SURVEY		PAGE OF FILE
		ALA	80	1.0-2.3	4/97		1. 7 97-058

97-058

SUMMARY OF PHOTO CONTROL POINTS

CHARGE UNIT-EXPND. AUTH. 04-01200K		PARTY CHIEF K. AKin		RECORDER KA		COMMENTS C = CLOTH P = PAINTED	
STATION	HORIZ & VERT	VERT ONLY	TARGET ELEV.	STA. ELEV.	TARGET		DESCRIPTION OR REMARKS
					C	P	
W-6		X		1.787		X	Set PK in AC Rd to radio towers 20m± N'ly of locked gate.
W-7		X		2.335		X	Set PK in S'ly Side of Burn Rd 3 ⁸² / ₂₁ N'ly of Chain link Fence.
W-8		X		2.416		X	Set PK in AC Parking lot 16m± SW'ly of dome shaped bldg & 2 ³⁰ / ₂₁ N'ly of N. edge trench patch.
W-9		X		1.535	X		Set spike 23m± W'ly of Chain link Fence on open ground.
W-10		X		1.287		X	Set PK on AC radio station rd near end.
W-11		X		1.758	X		Set spike 9m± N. of MHW line on open flat ground
W-12 (M3NR)		X		4.035		X	Fd RR spike with 't' in top next to Guard rail in small turn around.
CHECKED	DATE	CO.	RTE.	PM	DATE OF SURVEY		PAGE OF FILE
		Ala	80	1.0-2.3	4/97		3. 7 97-058

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SUMMARY OF PHOTO CONTROL POINTS

CHARGE UNIT-EXPND. AUTH. 04-01200K		PARTY CHIEF K. AKIN		RECORDER KA		COMMENTS C = CLOTH P = PAINTED	
STATION	HORIZ & VERT	VERT ONLY	TARGET ELEV.	STA. ELEV.	TARGET		DESCRIPTION OR REMARKS
					C	P	
W-13		X		2.223	X		Fd round head bolt w/chisled 't' in 1" diam Conc Circle N Side of Bay Bridge.
W-14		X		1.391	X		Set PN & Shnr in hub N. of radio tower rd 213Lm from S'ly face of 3"x5" post & 13 ⁹² m W'ly of center of 12 ¹ m x 0.30m x 1m Conc. block in the Sand.
W-15		X		2.003	X		Set PK in cntr of radio tower rd.
CHECKED	DATE	CO.	RTE.	PM	DATE OF SURVEY		PAGE OF FILE
		Ala	80	10-23	4/97		4 7 97-058

920-1.6

SUMMARY OF PHOTO CONTROL POINTS

CHARGE UNIT-EXPND. AUTH. 04-01200K		PARTY CHIEF K. Akin		RECORDER K. A.		COMMENTS C = CLOTH P = PAINTED	
STATION	HORIZ & VERT	VERT ONLY	TARGET ELEV.	STA. ELEV.	TARGET		DESCRIPTION OR REMARKS
					C	P	
V-1		X		2.346		X	Set PK in AC rd in Military base 1 ³² _m N of EP.
V-2		X		2.245		X	Fd RR spike with punch mark in & AC Military rd 6 ⁷⁶ _m SE'ly of 1 ⁵⁵ _m claim EBMUD Manhole.
V-2a		X		2.031		X	Set PK in AC Military Rd. 1 ¹² _m N. of S. EP.
V-3		X		1.946		X	Set PK in AC Military Rd. 2 ⁰⁹ _m N. of S. EP.
V-3a		X		1.728		X	Set PK in AC Military Rd. 0 ⁹⁴ _m N. of S. EP.
V-4		X		1.704		X	Set PK in AC Military Rd. 1 ¹⁰ _m N. of S. EP.
V-4a		X		1.950		X	Set PK in AC Military Rd. 1 ⁵⁰ _m N. of S. EP.
CHECKED		DATE		CO.	RTE.	PM	DATE OF SURVEY
				Ala	80	1 ⁰ -2 ³	4/97
							PAGE OF
							5 7
							FILE
							97-05B

97-05B

SUMMARY OF PHOTO CONTROL POINTS

CHARGE UNIT-EXPND. AUTH.		PARTY CHIEF		RECORDER		COMMENTS	
04-01200K		K. Akin		K. A.		C = CLOTH P = PAINTED	
STATION	HORIZ & VERT	VERT ONLY	TARGET ELEV.	STA. ELEV.	TARGET		DESCRIPTION OR REMARKS
					C	P	
V-5		X		2.317		X	Set PK in cntr of Ac Rd. 5M± S'ly of end AC dike.
V-6		X		2.996		X	Set PK in Ac Frontage Rd 1 ⁴² / _M S'ly of N. EP.
V-7		X		2.961		X	Set PK in W.B. lane Frontage Rd 1 ³⁰ / _M S of N. EP & 3M± W'ly of DI.
V-8		X		2.865		X	Set PK in E.B. lane Frontage Rd. 1 ⁷⁰ / _M N. of S. EP.
V-9		X		3.165		X	Set PK in S'ly shldr EB 80 7M± N'ly of conc. curb & 28M± E'ly of overhead Sign.
V-10		X		2.327		X	Set PN & Shnr on S'ly side Frontage Rd. NE'ly of the Western Gate to CT Paintyard & @ 4 Pt in CL Fence.
V-11		X		2.547		X	Set PN & Shnr in Cntr Frontage Rd. 50M± W'ly of W. end Paint Yard.
CHECKED	DATE	CO.	RTE.	PM	DATE OF SURVEY		PAGE OF FILE
		ALA	80	1 ⁰ - 2 ³	4/97		6 7 97-058

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SUMMARY OF PHOTO CONTROL POINTS

CHARGE UNIT-EXPND. AUTH. 04-01200K		PARTY CHIEF K. Akin		RECORDER K.A.		COMMENTS C = CLOTH P = PAINTED			
STATION	HORIZ & VERT	VERT ONLY	TARGET ELEV.	STA. ELEV.	TARGET		DESCRIPTION OR REMARKS		
					C	P			
V-12		X		2.449		X	Set PK in Ac N'ly CT Paint yard 5'± S'ly of K-Rail.		
V-13		X		2.430		X	Set PK on S. Shldr EB ramp to West Grand Ave 2 ⁰⁰ m N. of S. EP & 13M± W'ly of Electroliner		
V-14		X		2.579		X	Set PK in expansion joint Conc gutter S. Shldr EB 80 1 ¹² m N. of Conc. barrier.		
V-15		X		2.984		X	Set PK in AC 1 ²² m N'ly of lip Conc Gutter S'ly Shldr EB. 80.		
V-16		X		2.568		X	Set PK in Small access Rd. S. of EB lanes 80.		
CHECKED	DATE	CO.	RTE.	PM	DATE OF SURVEY		PAGE	OF	FILE
		ALA	80	1 ⁰ -2 ³	4/97		7	7	97-058

SURVEY NOTES

SURVEY DESCRIPTION

ties to existing Control

UNIT - EXPEND. AUTHOR.

04-0434FI

CO. RTE. PM

SF 80 1.01-1.5

PARTY CHIEF

K Akin

RECORDER

KA

INSTRUMENTMAN

C Schendel

INSTRUMENTS & NOS. - TAPE DATA - ETC

Wild T2002 & D1 1600 - Paravant

WEATHER

Cold & Cloudy

STATION

PM 189

Fd PK & Sh in cntr. Frontage Rd
GPS PT.

N 648293.627

E1839586.565

AR 742

Fd 1" IPP & T DN 0⁰²m, under
Power line 2²⁰m Southwly of S EP
Frontage Rd

N 648269.777

E1839484.677

PM 190

Fd PK & Sh. in cntr Frontage Rd
GPS PT

N 648238.417

E1839252.980

REMARKS

Metric 83

DATE OF SURVEY

1/15/97

CHECK BY - DATE

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OF

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FILE NO.

97-003



97-003

SURVEY NOTES

SURVEY DESCRIPTION

Ties to existing Control

UNIT - EXPEND. AUTHOR.

04-0434F1

CO. RTE. PM

SF 80 1.01-1.5

PARTY CHIEF

K. Akin

RECORDER

K. A.

INSTRUMENTMAN

C. Schendel

INSTRUMENTS & NOS. - TAPE DATA - ETC

Wild T2002 & DI 1600 - Paramnt

WEATHER

Cold & Cloudy

STATION

LP 63

Fd 1" IPP/T on open area next to Ocean.

N 648308.226

E1839075.621

TGT 110?

Fd Spike next to Ocean. This may be old TGT or it may be one of the spikes used to hold down cloth TGT. Check relationship before holding

M3NR

Fd RR spike in old TGT in ac of Turn-around, GPS PT.

N 648329.365

E1839290.275

ALA 15

Set CT3 cm alloy disk in Ac D/w to Raïdo towers 1³⁰m Ely of W EP and 11⁹⁰m SLY of Silver metal Pipe gate. GPS PT.

N 648577.706

E1840060.660

REMARKS

Metric 83

DATE OF SURVEY

1/15/96

CHECK BY - DATE

PAGE

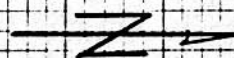
2

OF

2

FILE NO.

97-003



to S.F.

SF 80

Frontage Rd.

LP 63

TGT 110?

SF Bay

M3NR

GPS AZ Pair

D/w Access to Raïdo towers

11⁹⁰m